adaptec®

AHA-1510A

AT-to-SCSI Host Adapter

Installation Guide

Hardware Installation

Adaptec AHA™-1510A AT®-to-SCSI host adapters are designed to operate as shipped in most AT-class computers. The default settings are:

SCSI Disconnection*	Enabled
SCSI Address*	7
SCSI Parity*	Enabled
Terminators	Installed
Terminator Power	Supplied by host adapter
Synchronous Negotiation*	Disabled
Interrupt Channel	11
AT Port Address*	340h
Data Transfer Mode*	Programmed I/O

* These values are set by the aspi2dos software driver, provided with Adaptec EZ-SCSI or the ASW-1210, and by command line options in the config.sys file (see *Software Installation).*

Installing the Host Adapter

Caution

Turn OFF and disconnect power to the system and external equipment. Always refer to your system's documentation for instructions on removing the system cover and adding option boards.

1 Remove the cover of your computer to expose the AT expansion slots.

2 Locate an unused AT expansion slot. AT-type slots have two edge connectors (one 62-pin and the other 34-pin) in line with each other.

3 Remove the expansion slot cover for this slot.

4 Align and insert the host adapter into the AT slot. Use the expansion slot cover screw to secure the host adapter to the frame.

5 Attach the SCSI cable(s) to the host adapter and the peripherals, using the internal and/or external connector(s). Be sure to maintain pin-l orientation throughout the SCSI bus.

6 If the host adapter is not the first or the last device attached to the cable (i.e., if both internal and external connectors are used), remove the SCSI terminators from the host adapter.

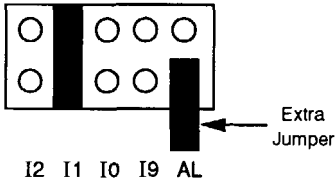
7 Replace the cover and connect the power.

Jumper Configuration Reference

One jumper block on the host adapter is used to configure user-selectable options. In the following diagram, the black bar covering both pins represents an installed jumper. In most cases, you will not need to change these settings.

Jumper Block J9 (IRQ Channel, Port Address)

Jumper block J9 default settings:



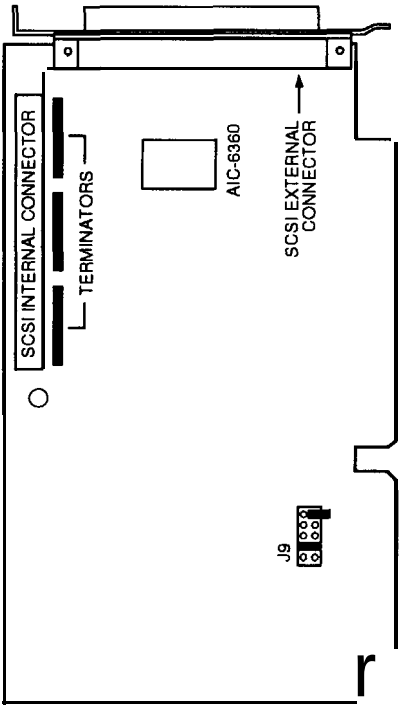
Pin Pair	Description
I2, I1, I0, I9	Determines IRQ channel IRQ 12 = jumper I2 IRQ 11* = jumper I1 IRQ 10 = jumper IO IRQ 9 = jumper I9 (not recommended with Windows 3.x)
AL	Determines port address range 340h-35Eh* = no jumper 140h-15Eh = jumper An extra jumper is provided in case you want to install it on the pin pair to change the port address.

* Default configuration

- One, and only one, of the IRQ channel pin pairs must be jumpered. If you change the setting from the default of IRQ 11 (pin pair 11) you must also change the /q option when you install *aspi2dos (see Software Installation).*
- If another Adaptec SCSI host adapter is already installed in your computer, change the interrupt of the AHA-1510A to something other than IRQ11.
- If you change the default port address by installing the extra jumper on pin pair AL, you must also change the /p option when you install *aspi2dos (see Software Installation).*

Setting Termination

The SCSI bus must be terminated correctly to ensure proper operation of the AHA-1510A host adapter. Terminators must be installed in the first and last physical devices on the SCSI cable and removed from all other SCSI devices. The three factory-installed terminators on the host adapter are located below the internal SCSI connector, as shown in this diagram:



The table below shows how termination should be set for the three possible SCSI device and host adapter configurations.

Devices Connected to Host Adapter	Host Adapter Terminators
Internal devices only (host adapter at end of cable)	All three installed
External devices only (host adapter at end of cable)	All three installed
Internal and external devices (host adapter in the middle)	All three removed

Booting the Computer

The AHA-1510A does not provide booting capability. If you want to boot from a SCSI drive installed on the host adapter, you can install an AHA-1520A or AHA-1522A. Both of these host adapter models provide booting capability.

Software Installation

DOS/Windows Platforms

If you have purchased Adaptec EZ-SCSI, insert the EZ-SCSI diskette in a floppy diskette drive, change to the drive letter of that drive (either ***A*** or B) and enter the command install. If you do not have EZ-SCSI, follow the instructions below for DOS installation.

Use the DOS copy command to copy the files from the ASW-1210 diskette to the root directory of drive C. Using any text editor, add these two lines to your *config.sys* file:

```
device = aspi2dos.sys /z /y- /u- /d
device = aspidisk.sys /d
```

Enter the lines in this order, or else the programs will not be installed when you boot your computer. You may also need to add the following command line options to the device driver lines in the *config.sys* file. (See the ASW-1210 ***Installation*** Guide for more information about these options.)

```
device = aspi2dos.sys [/p<port address>] [/L]
         [/c or /c-] [/y or /y-] [/u or /u-]
         [/h<HA SCS/ ID>] [/q<interrupt channels]
```

If you change the port address or the interrupt channel, you must also change the corresponding jumper block settings.

If a hard disk drive is attached to the AHA-1510A, you must use the aspidisk driver to access the disk. You must use the *afdisk* utility to format and partition SCSI disk devices.

To start *afdisk*, change to the directory where it is installed and enter afdisk at the DOS prompt.

Follow the directions on the screen to partition and format the selected SCSI devices, including removable media. Press F1 while *afdisk* is running to access on-line help. You can exit afdisk at any time without partitioning or formatting by pressing Esc.

When the SCSI device(s) are successfully partitioned and formatted, reboot the system. This saves any changes made and gives you access to the newly installed disk(s) or partitions(s). The new partitions will be installed with the *aspidisk* driver.

Other Operating Systems

Adaptec also provides software support for NetWare®, Unix® and OS/2®. For installation instructions, refer to the documentation provided with the specific software.

Adaptec Customer Support

- The Adaptec electronic Bulletin Board Service (BBS) provides information on software upgrades, new releases, technical advice, and more. You can reach the BBS 23 hours a day at 408-945-7727; 1200/2400/9600 baud, 8 data bits, 1 stop bit, no parity.

- You can reach the Adaptec Technical Support Hot Line at 800-959-SCSI (7274), or 408-945-2550.

  M-Th: 6:00 a.m. to 5:00 p.m. PST
  F: 6:00 a.m. to 3:00 p.m. PST

- You can reach the Adaptec Technical Support FAX 24 hours a day at 408-945-6776.

- You can order Adaptec software by calling **800-442-7274** or 818-365-6264.

  M-F: 5:00 a.m. to 6:00 p.m. PST

- You can request additional documentation for Adaptec products by calling 800-934-2766.

  M-F: 5:00 a.m. to 6:00 p.m. PST

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television equipment reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Move the equipment away from the receiver
- Plug the equipment into an outlet on a circuit different from that to which the receiver is powered
- If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions

CAUTION: Only equipment certified to comply with Class B (computer input/output devices, terminals, printers. etc.) should be attached to this equipment, and must have shielded interface cables.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the user's authority to operate such equipment.

Each AHA-1510A host adapter is equipped with an FCC compliance label which shows only the FCC identification number. The full text of the associated label follows:

> This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

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